Ordering number : EN920E

Monolithic Linear IC



No. 920E

LA7910

TV Tuner Band Selector

The LA7910 is an IC for tuner band selection of electronic tuning type television set. This IC is used for producing the VHF channel "L" band power supply/ VHF channel "H" band power supply/UHF channel power supply for tuner and the CATV power supply according to the band select signal of 2 inputs.

Functions

- VHF "L" band power supply output.
- VHF "H" band power supply output.
- UHF power supply output.
- CATV power supply output.

Features

- 2 inputs and 4 outputs.
- Low output saturation voltage : 0.25V typ., I_O=60mA
- Compact 9-pin single-end package.

Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V_9 max	15	V
Maximum Load Current	I_1 max, I_2 max, I_7 max, I_8 max	-60	mA
Maximum Supply Current V_{CC2}	I_6 max	10	mA
Allowable Power Dissipation	P_d max	200	mW
Operating Temperature	Topr	-20 to +85	°C
Storage Temperature	T_{stg}	-55 to +125	°C
Input Current	I_3 max, I_4 max	2	mA

Operating Characteristics at Ta=25°C

			min	typ	max	unit
Current Dissipation	I_1, I_2, I_7, I_8				60	mA
Output Saturation Voltage	$V_{O(sat)}$	V_9=12V, I_6=5mA, I_O=60mA	0	0.25	0.7	V
Input "H" Level Threshold Voltage	V_{TH}				3.0	V
Input "L" Level Threshold Voltage	V_{TL}		0.8			V
Output Leak Current	I_1, I_2, I_7, I_8	$T_a \leqq 70$°C			50	µA

Note) Current direction :
Current flowing into IC : Plus (No sign)
Current flowing out of IC : Minus (-)

Package Dimensions
(unit : mm)
3017C

22.3
1.5
1.0
4.8
5.7max
1
9
3.2
1.3
0.5
2.54
3.0
1.35
0.25

SANYO : SIP9

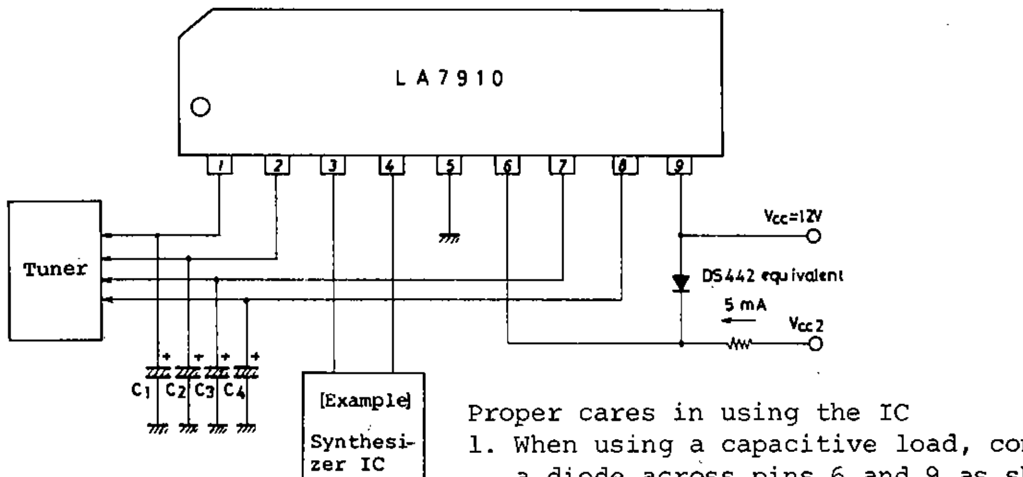
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Truth Table

Input		Output			
Pin 3	Pin 4	Pin 1	Pin 2	Pin 7	Pin 8
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

Input threshold voltage
: V_{TL}=0.8V, V_{TH}=3V

Sample Application Circuit



Proper cares in using the IC
1. When using a capacitive load, connect a diode across pins 6 and 9 as shwon above.
2. The value of load capacitors C1, C2, C3, C4 must not exceed 22uF.

